

132347-1

REMARKS

Claims 1-12 and 19-21 are pending in the present Application. Claims 13-18 and 21 have been withdrawn without prejudice, Claims 1, 2, 4, 6, 11 and 12 have been amended, leaving Claims 1-12 and 19-20 for consideration upon entry of the present Amendment. No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Amended Claims

Claim 1 has been amended to better define the invention. Support for the amendment may be found at least in paragraph [0021], where it is stated that tungsten may be substituted with molybdenum, if desired. This paragraph also provides that an exemplary amount of tungsten is about 1.9 to about 2.1 wt%, based on the weight of the aluminum-containing alloy. If tungsten in an amount of 1.9 to 2.1 wt% were to be substituted with molybdenum on a weight basis, it would be equal to 0.99 to 1.09 wt% molybdenum.

Claims 2 and 4 have been amended to provide proper antecedent basis and not to define over any prior art. Support for this amendment can be found at least on page 3, paragraph [0011] of the specification as filed.

Claim 6 has been amended to provide the proper antecedent basis. Since Claim 1 now claims molybdenum, the use of molybdenum in Claim 6 would be redundant.

Claim 11 has been amended to better define the invention. The term "comprising" has been amended to "consisting essentially of".

Claim 12 has been amended by replacing the term "may be" with "is". This amendment was not made for reasons of patentability.

132347-1

Withdrawn Claim

Claim 21 has been withdrawn without prejudice since it depends from another withdrawn claim, namely Claim 13.

Claim Rejections Under 37 C.F.R. 1.75(c)

Claims 2 and 4 has been objected to under 37 C.F.R. 1.75(c), "as being of improper dependent form for failing to further limit the subject matter of a previous claim." (Office Action Dated 11/10/2005, page 2) Claims 2 and 4 have been amended to provide proper antecedent basis and not to define over any prior art. Support for this amendment can be found at least on page 3, paragraph [0011] of the specification as filed. Applicants respectfully request a withdrawal of the objection under 37 C.F.R. 1.75(c) and allowance of the claims.

Claim 6 has been objected to based on the "following informality: 'zirconia' should read – zirconium –." (Office Action Dated 11/10/2005, page 2) Claim 6 has been amended to overcome this objection. Applicants respectfully request a withdrawal of the objection and allowance of the claim.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-2, 4-7 and 9-10 stand rejected under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent Number 6,177,046 to Simkovich et al. (hereinafter Simkovich). (Office Action dated 11/10/2005, page 3). Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

The present application is directed to and claims a nickel-containing alloy comprising about 1.5 to about 4.5 weight percent aluminum; about 1.5 to about 4.5 weight percent titanium; up to about 3 weight percent niobium; about 14 to about 28 weight percent chromium; about 0.99 to about 1.09 weight percent molybdenum; with the remainder being nickel. (see Claim 1)

132347-1

The present application is also directed to and claims a nickel-containing alloy consisting essentially of about 1.6 to about 1.8 weight percent aluminum; about 2.2 to about 2.4 weight percent titanium; about 1.25 to 1.45 weight percent niobium; about 22 to about 23 weight percent chromium; about 18.5 to about 19.5 weight percent cobalt; about 0.08 to about 0.12 weight percent carbon; about 1.9 to about 2.1 weight percent tungsten; and about 0.002 to about 0.006 weight percent boron; up to 0.01 weight percent zirconium; with the remainder being nickel. (see Claim 11)

Simkovich teaches improved Ni, Fe and Co based superalloys having excellent oxidation resistance and weldability. (see Abstract) Simkovich teaches a number of different compositions that comprise some or all of the following elements Al, Ti, B, C, Co, Cr, Fe, Hf, Y, Se, Mo, W, Nb, Ta, Ni, Pd, Re, Rh, and Zr. (see Tables in the application). However none of the compositions described by Simkovich comprise a combination of about 1.5 to about 4.5 weight percent aluminum; about 1.5 to about 4.5 weight percent titanium; and about 0.99 to about 1.09 weight percent of molybdenum. Since Simkovich does not teach all elements of the claimed invention, it cannot anticipate the claimed invention. Applicants respectfully request a withdrawal of the § 102(b) rejection over Simkovich and an allowance of the claims.

Claims 1, 3 and 8 are rejected under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent Number 6,258,317 to Smith et al. (hereinafter Smith). (Office Action dated 11/10/2005, page 4). Applicants respectfully traverse this rejection.

In making the rejection, the Examiner has stated "[R]egarding Claim 1, Smith et al. teach (see Table 2B, alloy B) a nickel-containing alloy comprising 1.5 weight percent aluminum, 2.5 weight percent titanium, no niobium, and 20.00 weight percent chromium, with the remainder being nickel." (Office Action dated 11/10/2005, page 4)

Smith teaches a boiler tubing alloy consisting of 10 to 24 cobalt, 22.6 to 30 chromium, 2.4 to 6 molybdenum, 0 to 9 iron, 0.2 to 3.2 aluminum, 0.2 to 2.8 titanium, 0.1 to 2.5 niobium, 0 to 2 manganese, 0 to 1 silicon, 0.01 to 0.3 zirconium, 0.001 to 0.01

132347-1

boron, 0.005 to 0.3 carbon, 0 to 4 tungsten, 0 to 1 tantalum and balance nickel and incidental impurities, wherein the aforementioned ranges are in weight percents. (see Abstract)

As can be seen above, Smith discloses a composition that contains 2.4 to 6 weight percent molybdenum, while Claim 1 of the present application is directed to a composition that contains 0.99 to 1.09 weight percent molybdenum. For this reason at least, Smith cannot anticipate Claim 1 of the present application.

Claim 11 of the present application uses the transition language "consisting essentially of" and does not include molybdenum. For this reason at Smith cannot anticipate Claim 11 of the present application. Applicants respectfully request a withdrawal of the § 102(b) rejection over Smith and an allowance of the claims.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Smith. (Office Action dated 11/10/2005, page 5) Applicants respectfully traverse this rejection.

In making the rejection, the Examiner states "[T]he ranges of each of the elements of Smith overlap with that of the claimed invention." (Office Action dated 11/10/2005, page 5)

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165

132347-1

U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

As noted above, Smith does not teach all elements of the claimed invention. Since Smith does not teach all elements of the claimed invention there is no motivation for one of ordinary skill in the art to modify Smith.

Smith further teaches that in order for its composition to provide adequate resistance to stress corrosion cracking a minimum of 2.4 wt% of molybdenum is required. (Col. 2, lines 53 – 55) Similarly, equation (1) and (2) both show the need for at least 2.4 wt% molybdenum. Clearly one of ordinary skill in the art upon reading Smith would not have sought to modify the composition by excluding molybdenum, as the presently claimed composition of Claim 11 does. In other words, Smith teaches away from the presently claimed composition.

Since Smith does not teach all elements of the claimed composition and since there is no motivation to modify Smith, the Examiner has not made a prima facie case of obviousness over Smith. Applicants respectfully request a withdrawal of the obviousness rejection over Smith and an allowance of the claims.

132347-1

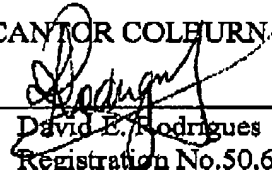
It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0868.

Respectfully submitted,

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